Setting Standards for Excellence

National Electrical Manufacturers Association
Luminaire Section
Statement of Principles Regarding
State Outdoor Lighting Legislation and Codes
February, 2002

Properly designed outdoor lighting can have a positive impact on local communities and the environment. The NEMA Luminaire Section manufacturers believe that outdoor lighting legislation and codes should respect and address the following key issues:

- **Make Use of Limited Uplight Equipment.** Promoting limited uplight equipment will achieve effective light distribution while addressing energy consumption, sky glow, safety, security and operating costs and concerns. The mandatory use of full cut-off lighting will restrict design flexibility, increase energy consumption, and may increase sky glow.

- **Promote Technological Solutions.** Lighting professionals need a full range of options at their disposal to effectively address outdoor lighting concerns. The flat restriction of general product types will limit the use of new product technologies. Qualified lighting professionals recommend lighting that provides a minimum acceptable illuminance for a designated purpose (based on nationally recognized standards). Code requirements should also recognize a two percent (2%) uplight provision above the horizontal plane of the luminaire for outdoor lighting.

- **Pole Height Limitations.** Pole height limitations result in poor lighting uniformity, increased costs, greater sky glow, and higher energy consumption. Pole height mandates will increase the number of poles and luminaires required. This will increase costs and energy consumption.

- **Lumens Per Watt Efficacy Mandates.** Some higher efficacy lamps concentrate their output in the yellow portion of the visual spectrum. These types of lamps may cause color identification problems. They may also reduce night time visual response important to safety. In areas where color identification or visual response is not critical, these lamps may be appropriate. However, they should not be mandated. Low Pressure Sodium lamps may be appropriate in the vicinity of observatories.

- **Flexible Outdoor Lighting Use Times.** It is important to evaluate the effectiveness of scheduled outdoor lighting operation time frames. Reducing late-night light levels may be effective in some areas to reduce energy consumption and sky glow. However these schedules must be flexible and sensitive to safety and security issues.

- **Recognize Exemptions.** Codes should allow exemptions for (among others) --
    - significant safety or security concerns;
    - historic or residential streets that require special product aesthetics or vertical illuminance criteria (this exemption may be designed to limit the lamp lumens or wattage to control glare and light trespass);
    - temporary lighting used for emergency or nighttime work;
    - lighting used solely to enhance the beauty of an object; and
    - special public events

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